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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,161	09/11/2003	Raymond Walter Manfred Schuppe	ROC920030186US1	7599
30206	7590	05/17/2006	EXAMINER	
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			LUU, CUONG V	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/660,161	Applicant(s) SCHUPPE, RAYMOND WALTER MANFRED	
	Examiner Cuong V. Luu	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-18 are pending. Claims 1-18 have been examined. Claims 6-7 and 14-15 have been objected. Claims 1-5, 8-13, and 16-18 have been rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Haufe et al (Speeding Up Simulation by Emulation – A Case Study, Design, Automation and Test in Europe Conference DATE'99, Munich, Germany, 9-12 March 1999, Proceeding User's Forum, 127-134).

1. As per claim 1, Haufe et al teach a method for implementing dynamic cosimulation comprising the steps of:
 - utilizing a cosimulation bridge for data exchange between a primary simulator and a secondary simulator (p. 127, section 2, Combining simulation and emulation, paragraph 1 in the section, lines 1-3);
 - defining a plurality of user selected optimization control signals over said cosimulation bridge (p. 131, section 2.3.3, Timing resolution, paragraph 3 in the section);

identifying at least one user selected optimization control signal for disabling said cosimulation bridge (p. 131, section 2.3.3, Timing resolution, paragraph 3 in the section); and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge (p. 130, section 2.3.2 Synchronization, paragraph 1 in the section, lines 3-5).

2. As per claim 2, Haufe et al teach the steps of checking whether said identified at least one user selected optimization control signal for disabling said cosimulation bridge remains active; and responsive to said identified at least one user selected optimization control signal being inactive for enabling said cosimulation bridge (p. 130, section 2.3.2, paragraphs 2. Haufe et al teach "sampling emulator response", which is interpreted as monitoring if the disabling of the co-simulation bridge is still active, and "propagating emulator response into the simulator partition", which is regarded as disabling the user-control signal to enable the co-simulation bridge).
3. As per claim 3, Haufe et al teach the steps of dynamically re-engaging said primary simulator and said secondary simulator for said data exchange responsive to said enabling said cosimulation bridge (p. 130, section 2.3.2, paragraphs 2. Haufe et al teach "propagating emulator response into the simulator partition", which is regarded as dynamically re-engaging the primary and secondary simulators for data exchange).
4. As per claim 4, Haufe et al teach the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a single sided

disable; said single sided disable defining a disable control signal for said secondary simulator (p. 131, section 2.3.3, Timing resolution, paragraph 3 in the section).

5. As per claim 5, Haufe et al teach the step of defining a plurality of user selected optimization control signals over said cosimulation bridge including the steps of defining a two independent disable; said two independent disable defining a respective disable control signal for each of said primary simulator and said secondary simulator (p. 130, section 2.3.2, paragraph 1, lines 3-4. Haufe et al's teaching of the simulator and emulator executing alternately is regarded as a two independent disable; said two independent disable defining a respective disable control signal for each of said primary simulator and said secondary simulator).
6. As per claim 8, Haufe et al teach the step of defining a plurality of user selected optimization control signals over said cosimulation bridge includes the steps of defining a suspend signal for each of said primary simulator and said secondary simulator (p. 130, section 2.3.2 Synchronization, paragraph 1 in the section, lines 3-5. Haufe et al teach the capability of suspending the software simulator or emulator. This is regarded as having suspend signals to suspend those 2 modules).
7. As per claim 9, Haufe et al teach Apparatus for implementing dynamic cosimulation (p. 130, Fig. 3) comprising (the below limitations have already been discussed in claim 1. They are, therefore, rejected for the same reasons):

a cosimulation bridge for data exchange between a primary simulator and a secondary simulator;

a plurality of user selected optimization control signals defined over said cosimulation bridge;

a control program for identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and for dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

8. As per claim 10, these limitations have already been discussed in claim 2. They are, therefore, rejected for the same reasons.

9. As per claim 11, these limitations have already been discussed in claim 3. They are, therefore, rejected for the same reasons.

10. As per claim 12, these limitations have already been discussed in claim 4. They are, therefore, rejected for the same reasons.

11. As per claim 13, these limitations have already been discussed in claim 5. They are, therefore, rejected for the same reasons.

12. As per claim 16, these limitations have already been discussed in claim 8. They are, therefore, rejected for the same reasons.

13. As per claim 17, Haufe et al teach a computer program product for implementing dynamic cosimulation in a computer system including a cosimulation bridge for data exchange

between a primary simulator and a secondary simulator, said computer program product including instructions executed by the computer system (p. 129, section 2.3.1, paragraph 1) to cause the computer system to perform the steps of (the below limitations have already been discussed in claim 1. They are, therefore, rejected for the same reasons):

defining a plurality of user selected optimization control signals over said cosimulation bridge;

identifying at least one user selected optimization control signal for disabling said cosimulation bridge; and

dynamically disengaging said primary simulator and said secondary simulator for ending data exchange responsive to said disabling said cosimulation bridge.

14. As per claim 18, these limitations have already been discussed in claim 2. They are, therefore, rejected for the same reasons.

Allowable Subject Matter

Claim 6-7 and 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. As per claims 6 and 7, are objected to as being dependent upon the rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim.

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16. As per claims 14 and 15, are objected to as being dependent upon the rejected base claim 9, but would be allowable if rewritten in independent form including all of the limitations of the base claim.

The following is a statement of reasons for the indication of allowable subject matter:

17. As per claim 6 and 14, the prior art teaches a method for implementing dynamic cosimulation as recited in claim 1 but does not the steps of defining a functional OR disable; said functional OR disable defining a common disable for both said primary simulator and said secondary simulator; either said primary simulator or said secondary simulator activating a functional OR disable to activate said common disable as recited in the claim invention.

18. As per claim 7 and 15, the prior art teaches a method for implementing dynamic cosimulation as recited in claim 1 but does not teach the steps of defining a functional AND disable; said functional AND disable defining a common disable for both said primary simulator and said secondary simulator; both said primary simulator and said secondary simulator activating a functional AND disable to activate said common disable.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong V. Luu whose telephone number is 571-272-8572. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah, can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. An inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CVL


KAMINI SHAH
SUPERVISORY PATENT EXAMINER